

WHAT IS CLAIMED IS:

1. A process for reducing the cold flow of a polymer having repeating units derived from at least one C₄ to C₇ isomonoolefin monomer, at least one C₄ to C₁₄ multiolefin monomer and optionally further monomers comprising the step of admixing a C₄ to C₇ isomonoolefin monomer and at least one C₄ to C₁₄ multiolefin monomer and optionally further monomers in the presence of a catalyst system and optionally an organic nitro compound, wherein the amount of repeating units derived from at least one multiolefin monomer in the polymer is more than 2.0 mol%.
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2. A method according to Claim 1, wherein in the amount of repeating units derived from the multiolefin monomer(s) in the polymer more than 2.5 mol%.
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3. A method according to Claim 1, wherein the polymer is halogenated.
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4. The method according to Claim 1 wherein the C₄ to C₇ monoolefin is selected from the group consisting of isobutylene, 2-methyl-1-butene, 3-methyl-1-butene, 2-methyl-2-butene, 4-methyl-1-pentene and mixtures thereof.
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5. The method according to Claim 1, wherein the C₄ to C₁₄ multiolefin monomer(s) is selected from the group consisting of isoprene, butadiene, 2-methylbutadiene, 2,4-dimethylbutadiene, piperyline, 3-methyl-1,3-pentadiene, 2,4-hexadiene, 2-neopentylbutadiene, 2-methyl-1,5-hexadiene, 2,5-dimethyl-2,4-hexadiene, 2-methyl-1,4-pentadiene, 2-methyl-1,6-heptadiene, cyclopenta-diene, methylcyclopentadiene, cyclohexadiene, 1-vinyl-cyclohexadiene or mixtures thereof.
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6. The method according to Claim 5, wherein the C₄ to C₁₄ multiolefin monomer(s) is isoprene.
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7. The method according to Claim 1, wherein the catalyst comprises a dialkylaluminum halide, a monoalkylaluminum dihalide and at least one of a member selected from the group consisting of water, aluminoxane and mixtures thereof.

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8. The method according to Claim 1, wherein the optional further monomer is selected from the group consisting of p-methylstyrene, styrene, α -methylstyrene, p-chlorostyrene, p-methoxystyrene, indene, indene derivatives and mixtures thereof.